

Considerations in Designing a Tobacco Services Benefit

Susan J. Curry, Ph.D.

**Director, Center for Health Studies,
Group Health Cooperative of Puget
Sound**

Topics

- Elements of effective tobacco control strategy
- Facilitators & barriers to providing benefits
- Benefit design considerations
- Cost effectiveness of AHCPR Guideline recommendations
- Use and cost-effectiveness of smoking cessation services under four benefit structures
- Impact of smoking cessation on health care utilization

Elements of effective tobacco control strategy



Organization-Level

Benefit policies
Resource Allocation



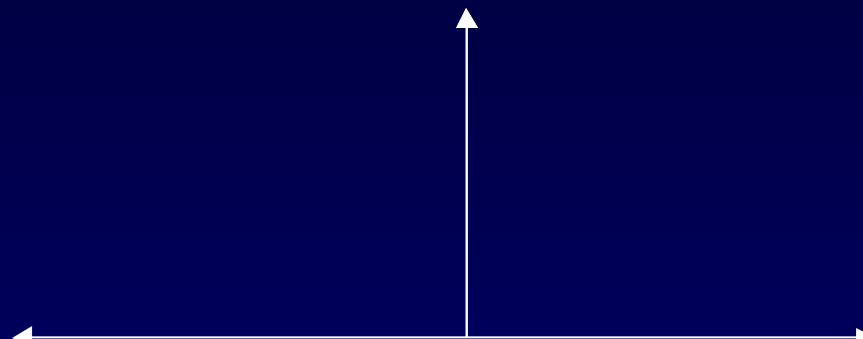
Practice-Level

Practice Guidelines
Automated Systems



Individual-Level

Effective cessation
treatments



Elements of effective tobacco control strategy

■ Building blocks

- Organizational commitment, investment of resources
- Evidence-based practice guideline with appropriate infrastructure
- Effective smoking cessation treatments

Facilitators & Barriers: Organization-Level

- ✓ Clinical preventive care focus
- ✓ Performance measures
- ✓ “Managed competition”
- ✗ Traditional view of health insurance
- ✗ Lack of data on cost savings & demand for services
- ✗ Perceived ineffectiveness of treatment

Facilitators & Barriers: Practice Level

- ✓ Evidence-based practice guideline (AHCPR, 1996)
- ✓ Clinical information systems and computerized medical records
- ✗ Low confidence
- ✗ Time constraints
- ✗ No financial incentives
- ✗ No supportive infrastructure
- ✗ Perceived ineffectiveness of treatment

Facilitators & Barriers: Individual Level

- ✓ Effective behavioral programs
 - Self-help + written or phone adjuncts don't require attendance at group sessions
- ✓ Effective pharmacotherapies
 - OTC nicotine replacement
 - Zyban™
 - Nasal sprays
- ✗ Lack of demand

Issues in benefit design

- Identifying effective programs
 - Behavioral
 - Pharmacological
- In-house or external treatment model
- Bundling or unbundling behavioral and pharmacotherapy coverage
- Full coverage or cost sharing
- Defining limits on use of benefit

Content of effective behavioral programs

- Address different levels of readiness to change
- Emphasize positive results and avoid high threat communications
- Provide specific behavioral skills
- Provide meaningful supports
- Provide opportunities for individual tailoring
- Have consistent and repeated follow-up as part of routine care

Format of effective behavioral programs

- Can be delivered in groups (in person) or individually (in person or by phone)
- Regardless of format look for:
 - Person to person contact of at least 10 minutes' duration
 - At least 4 to 7 treatment contacts
 - Duration of at least two weeks

In-house or carve-out?

- Advantages to in-house program
 - integrated part of health care delivery
 - quality control
 - tracking of outcomes and consumer satisfaction
 - behavioral programs not tied to specific pharmacotherapy

Bundling of Behavioral and Pharmacotherapy Treatments

■ Rationale

- Most pharmacotherapy efficacy trials included behavioral treatment components in study protocols
- Encourages smokers to address all aspects of tobacco use and cessation
- Opportunity for more careful monitoring of use of pharmacological aids
- Enhances overall commitment of patient to cessation treatment

Full coverage or cost sharing?

- Reimbursement or up-front coverage
- Issues are demand and motivation
 - motivational filter?
 - barrier?
- Context for evaluating costs of full coverage
 - comparisons to other medical treatments

Limits on use of benefit

■ Dollar limit

- Applied in reimbursement model and with carve-out cessation programs

■ Registration limit

- Applied with in-house behavioral programs with up-front coverage

■ Pharmacy limit

- Predefined length of treatment (# of fills)

Cost effectiveness of AHCPR Smoking Cessation Guideline Recommendations

- Cromwell J, Bartosch WJ, Fiore MC, Hasselblad V, Baker T. (1997) Cost-effectiveness of the Clinical Practice Recommendations in the AHCPR Guideline for Smoking Cessation. Journal of the American Medical Association, 278(21):1759-1766.

Smoking Cessation Costs Per Participant (estimated)

Cessation Intervention	Total Cost per Participant (\$)	
	Successful	Failed
Without nicotine replacement		
Brief counseling	37.79	37.79
Individual intensive counseling	104.50	104.50
Group intensive counseling	53.14	53.14
With transdermal nicotine		
Brief counseling	262.93	158.08
Individual intensive counseling	323.73	218.88
Group intensive counseling	272.37	167.52

Cost per quit & year of life saved (estimated for US adult population)

Cessation Intervention	Cost Per Quitter	Cost per Life-Year Saved
Without nicotine replacement		
Brief counseling	6276	4296
Individual intensive counseling	3595	2461
Group intensive counseling	2186	1496
With transdermal nicotine		
Brief counseling	4184	2864
Individual intensive counseling	2871	1969
Group intensive counseling	2310	1581

Assumptions: 25% of US adults smoke, 75% try to quit, 40% choose brief counseling, 2.5% individual intensive counseling, 2.5% group intensive counseling

Use and cost-effectiveness of smoking cessation services under four benefit structures

- Curry SJ, Grothaus LC, McAfee T, Pabiniak C. (1998) Use and cost effectiveness of smoking cessation services under four insurance plans in a health maintenance organization. New England Journal of Medicine, 339(10):673-679.

Tobacco services benefit evaluation

General findings

- Participation ranged from 5-11% of smokers
- Cessation rates at 6 month follow-up ranged from 28% to 38%
- Adding copayments for NRT reduced it's use among behavioral program participants
- Removing copayments for behavioral program increased it's use
- Full coverage can double quit rate in general population

Summary of estimated effects of four coverage plans

Coverage	Smokers Using benefit in Year 2 (%)	Benefit users who quit (%)	Smokers who would quit per year (%)	Cost to plan per benefit user (\$)	Annual cost per smoker (\$)	Annual cost per enrollee (\$)
Standard	3.5	38	1.3	302	11	1.59
Reduced	2.4	31	0.7	248	6	0.89
Flipped	5.3	33	1.7	287	15	2.28
Full	10.0	28	2.8	328	33	4.92

Cost per year of life saved

- \$883.00
 - full coverage smoking cessation service
- \$11,300
 - treatment of moderate hypertension
- \$65,511
 - treatment of hypercholesterolemia

Impact of smoking cessation on health care utilization

- Wagner EH, Curry SJ, Grothaus L, Saunders KW, McBride CM. (1995) The impact of smoking and quitting on health care use. Archives of Internal Medicine, 155: 1789-1795.

Impact of smoking cessation on health care utilization

- Compared outpatient and hospital service use over 5-6 years for quitters & smokers
- Among continued smokers
 - 7% to 15% increase in outpatient visits
 - 30% to 45% increase in hospital admissions
- Among quitters
 - Increased use during year they quit
 - Progressive decline in h/c use over time
 - Utilization significantly lower by year 4